

# A LESSON IN METRICS

Measurements within the metric system are based on units of 10 known as the decimal system.

Basic units of the metric system are:

⇒ **Meter** - measurement of length and area

*length*

1 meter = 39.37 in.  
1.09 yd.

*area*

1 sq. meter = 1550 sq. in.  
10.76 sq. ft.

⇒ **Liter** - measurement of capacity

*liquid*

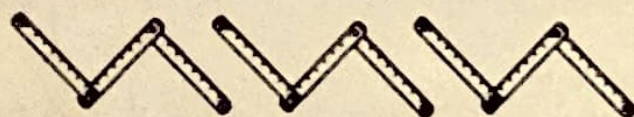
1 liter = 33.81 oz.  
1.05 qt.

*dry*

1 liter = 61.02 cu. in.  
.908 dry qt.

⇒ **Gram** - measurement of weight

1 gram = .035 oz.  
.002 lb.



⇒ To these basic units are added prefixes representing different powers of 10. Some of the prefixes are:

kilo = 1000

hecto = 100

deka = 10

deci = 1/10

centi = 1/100

milli = 1/1000

⇒ By combining the prefixes and the basic units, we can understand the following:

kilogram

hectoliter

dekameter

decigram

centiliter

millimeter

1000 grams

100 liters

10 meters

.1 gram

.01 liter

.001 meter